Lemma 2. *Let* $p_1,\dots p_n$ *be finite family of such strongly-prime modules, that* $p_1 \approx \dots \approx p_n$ *, than* $\cap_{i=1}^{n} p_i$ *is strongly-prime module and* $p_1 \approx \cap_{i=1}^{n} p_i$.

Lemma 3. *For every strongly-prime left submodule* p *of some module* M *holds that* $b(p) \in Cspec(M)$ [2].

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ON CLASSICAL DIFFERENTIALLY PRIMARY SUBMODULES

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Commutative differential rings with nonzero identity and the set $\Delta = \{\delta_1,...,\delta_n\}$ of paiwise commutative derications, and unitary modules over them are considered [1].

A proper differential submodule Q of the differential module M is called *classical differentially primary submodule* of M if for each $a,b \in R$, $n,k \in \mathbb{N} \cup \{0\}$, and a differential submodule $N \subseteq M$, $ab^{(n)}N \subseteq Q$ follows either $a^{(n)}N \subseteq Q$ or $b^k N \subseteq Q$.

Theorem 1. *Let* M *be a Noetherian differential* R*–module and* Q *be its proper submodule. Then* Q *is a classical differentially primary submodule if and only if* $(Q:N)$ *is a differentially primary ideal of* R *for every differential submodule* N *of* M *such that* $N \not\subset Q$.

Theorem 2. *Let* M *be a differential* R*-module and* Q *be its proper submodule. Then the following statements are equivalent:*

1. Q *is a classical differentially primary submodule;*
2. *Forevery* $m \in M$, $(Q:m^{(\infty)})$ *is a differentially primary ideal of* R .

An R-module M is called *differentially multiplication* [2] if for every differential submodule N of M there exists a differential ideal I of R such that $N = IM$.

Theorem 3. *Let* M *be a differentially multiplication* R*-module and* Q *be its proper submodule. Then the following statements are equivalent:*

1. Q *is a classical differentially primary submodule;*
2. Q *is a differentially primary submodule;*
3. $(Q:M)$ *is a differentially primary ideal of* R *;*
4. $Q = QM$ *, where* Q *is a differentially primary ideal which is maximal with respect to the property* $IM = Q$ *follows* $I \subseteq Q$ *(* I *is a differential ideal of* R *).*

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SUBHARMONIC FUNCTIONS IN A UNIT BALL THAT GROWS NEAR A PART OF THE BOUNDARY

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We consider subharmonic functions in the unit n-dimensional ball, which grow near some part of the boundary, and get integral estimates for their Riesz measures.

To formulate our results we need some notations. Suppose B is n-dimensional ball, $E = \overline{E} \subset \partial B, \phi : R^+ \to R^+$ is monotonically decreasing continues function, $\phi(t) \to \infty$ as $t \to 0$. For $z \in \overline{B}$ put $\rho(z) = dist(z,E)$, $F(t) = m_{n-1}\{\zeta \in \partial B : \rho(\zeta) < t\}$, where m_{n-1} is the normalized (n−1)-dimensional Lebesgue measure.

Theorem 1. *Let v(z) be a subharmonic function in B,* $v(z) \neq -\infty$,

$$v(z) \le \phi(\rho(z)) \qquad (1)$$

for all $z \in B$. *If*

$$\int_0^2 \phi(s)dF(s) < \infty \qquad (2)$$

then the Reisz measure $\mu = c_{n-1}\Delta v$ *satisfies the condition*

$$\int_B (1-|\lambda|)\mu(d\lambda) < \infty. \qquad (3)$$

When condition (2) is broken, integral (3) may diverge. In this case we can control the growth of Riesz measure as well.

Theorem 2. *Suppose* ϕ, ψ *are absolutely continues positive functions on (0, 2),* $\phi(t)$ *monotonically decreases and* $\psi(t)$ *monotonically increases,* $\phi(t) \to +\infty$ *as* $t \to +0$, $\psi(t) \to 0$ *as* $t \to +0$*, and*

$$\int_0^1 (-\phi'(t))\psi(t)F(t)dt < \infty \qquad (4)$$

If condition (1) is satisfied for a subharmonic function v(z) in B, then its Riesz measure μ satisfies the condition

$$\int_B \psi(k_n\rho(\lambda))(1-|\lambda|)\mu(d\lambda) < \infty \qquad (5)$$

where the constant $k_n \le 1$ *depends on the dimension only.*

Also, we show that our results are close to optimal ones.